

Figure 1

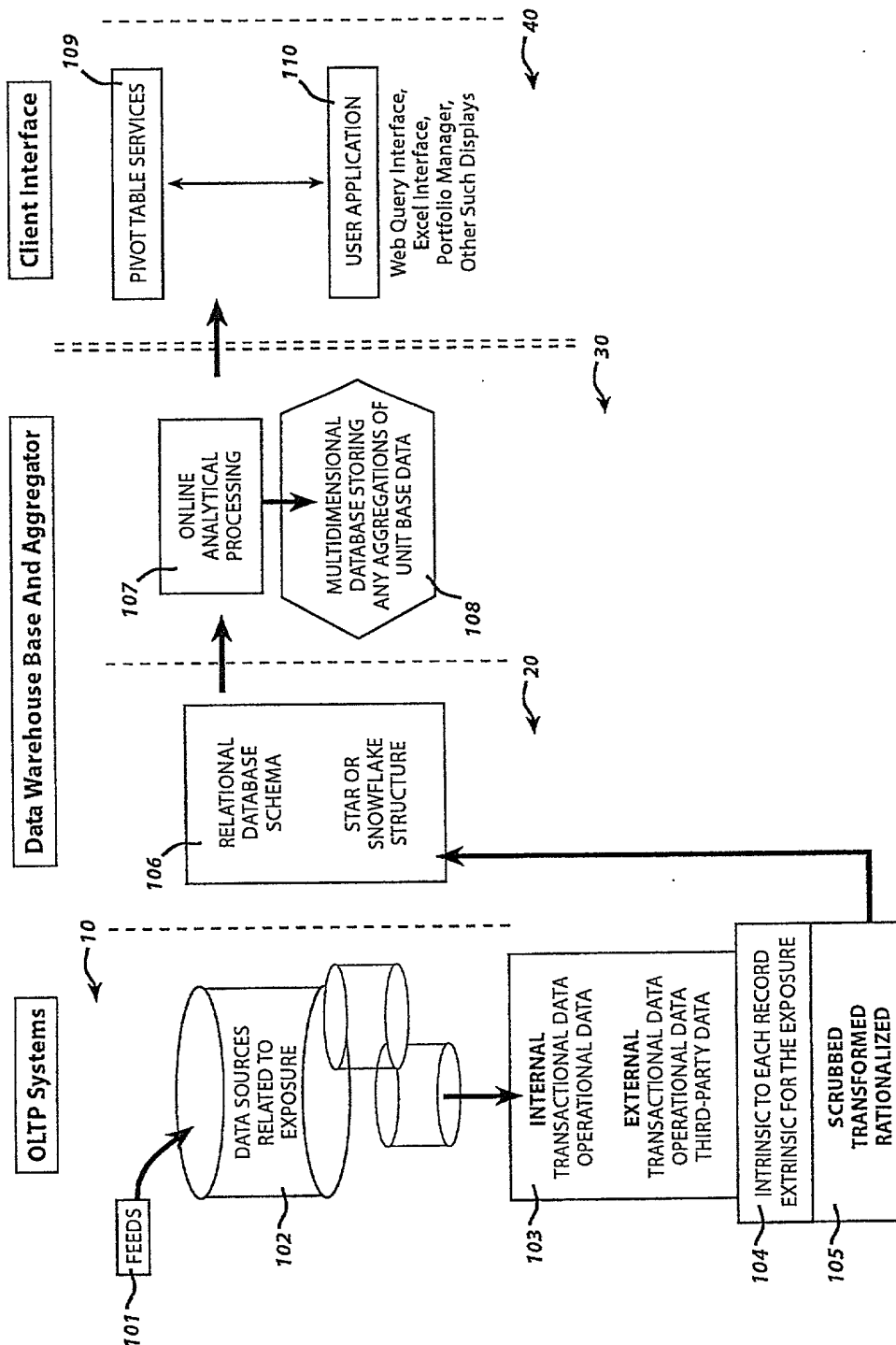


Figure 2a

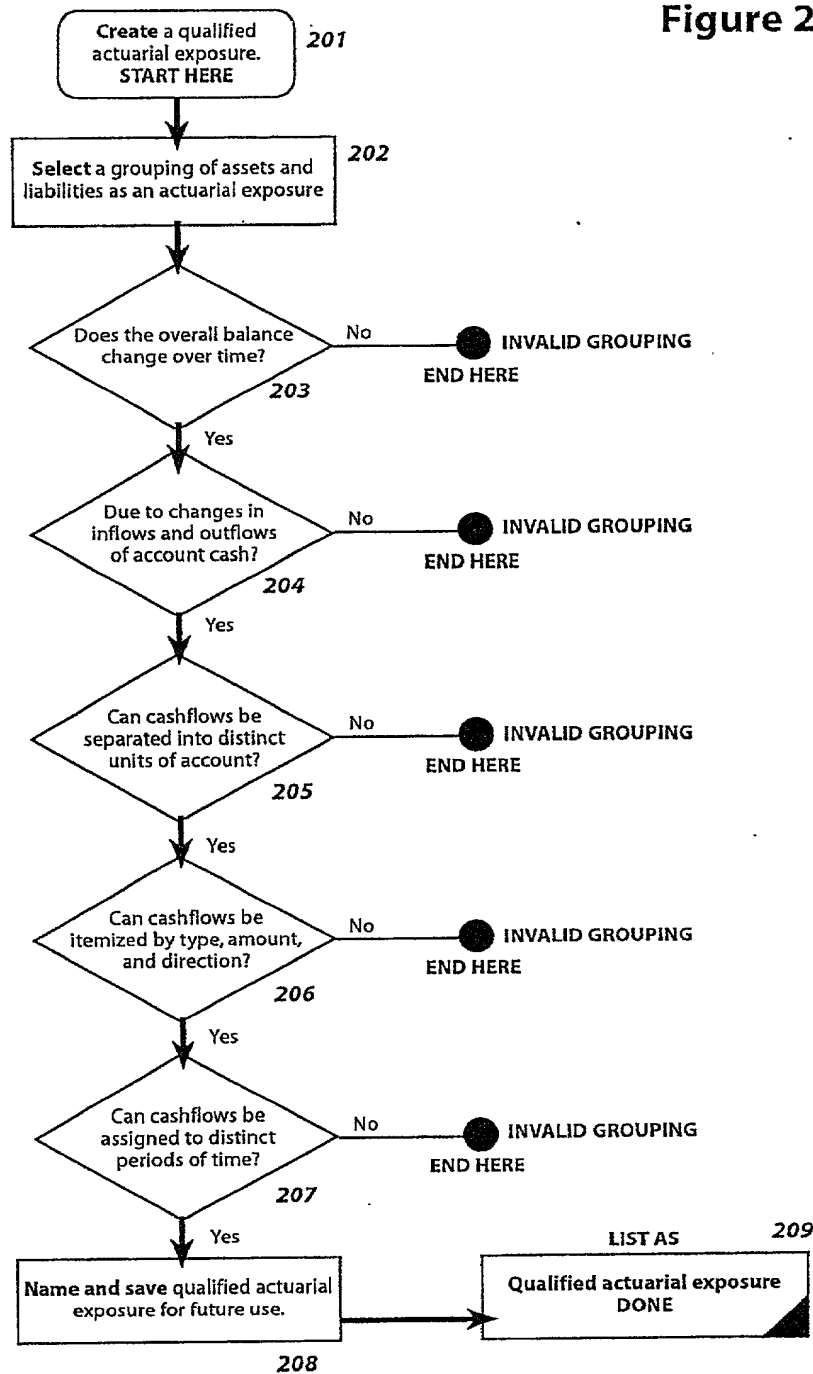

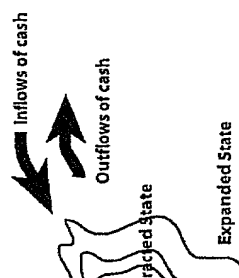


Figure 2b

ACTUARIAL TRADING SYSTEM - Browser File Edit View Favorites Tools Help	<p>Today's Date: 21 May 2001 Mon</p> <h3 style="text-align: center;">QUALIFY AN ACTUARIAL EXPOSURE</h3> <div style="margin-top: 20px;">  <p>1</p> <p>Select a grouping of assets and liabilities ...</p> <p>An exposure is any grouping of assets or liabilities that has uncertainty and costs associated with incoming or outgoing cashflows, be they real or potential; for now, or for the future.</p> <p>As inflows and outflows to the exposure increase and/or decrease, the absolute value of current assets and liabilities within that exposure may expand or contract.</p> </div> <div style="margin-top: 20px;">  <p>2</p> <p>The "ragged look" of the exposure is due to the fact that it is n-dimensional. The balances increase or decrease across differently nominated risk dimensions.</p> </div>
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Does the overall balance change over time? 255

☒ YES ☐ NO

Due to changes in inflows and outflows of account cash? 256

☐ YES ☒ NO

Can cashflows be separated into distinct units of account? 257

☐ YES ☐ NO

Can cashflows be itemized by type, amount, and direction? 258

☐ YES ☐ NO

Can cashflows be assigned to distinct periods of time? 259

☐ YES ☐ NO

Figure 3a

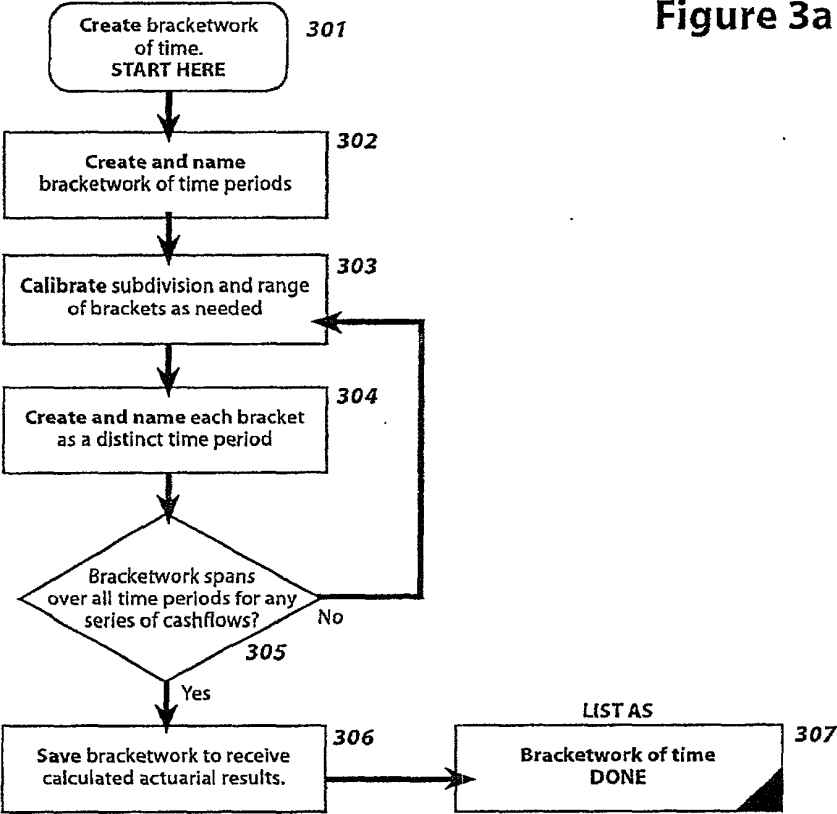



Figure 3b

 ACTUARIAL TRADING SYSTEM - Browser

File Edit View Favorites Tools Help

CREATE A BRACKETWORK OF TIME FOR REPORTING ACTUARIAL RESULTS Today's Date: 21 May 2001 Mon

Save a bracketwork of time periods.

Bracketwork 1:

Years for Reporting

SAVE

Bracketwork 2:

Trust Series Schedule

SAVE

351

352

353

354

355

356

357

358

359

Before 1999

2000

2001

2002

After 2002

Trust Series C

C and D

Trust Series D

D and E

E

Today is
May 21, 2001

ADD

MODIFY

DELETE

SAVE

Bracket

Figure 4a

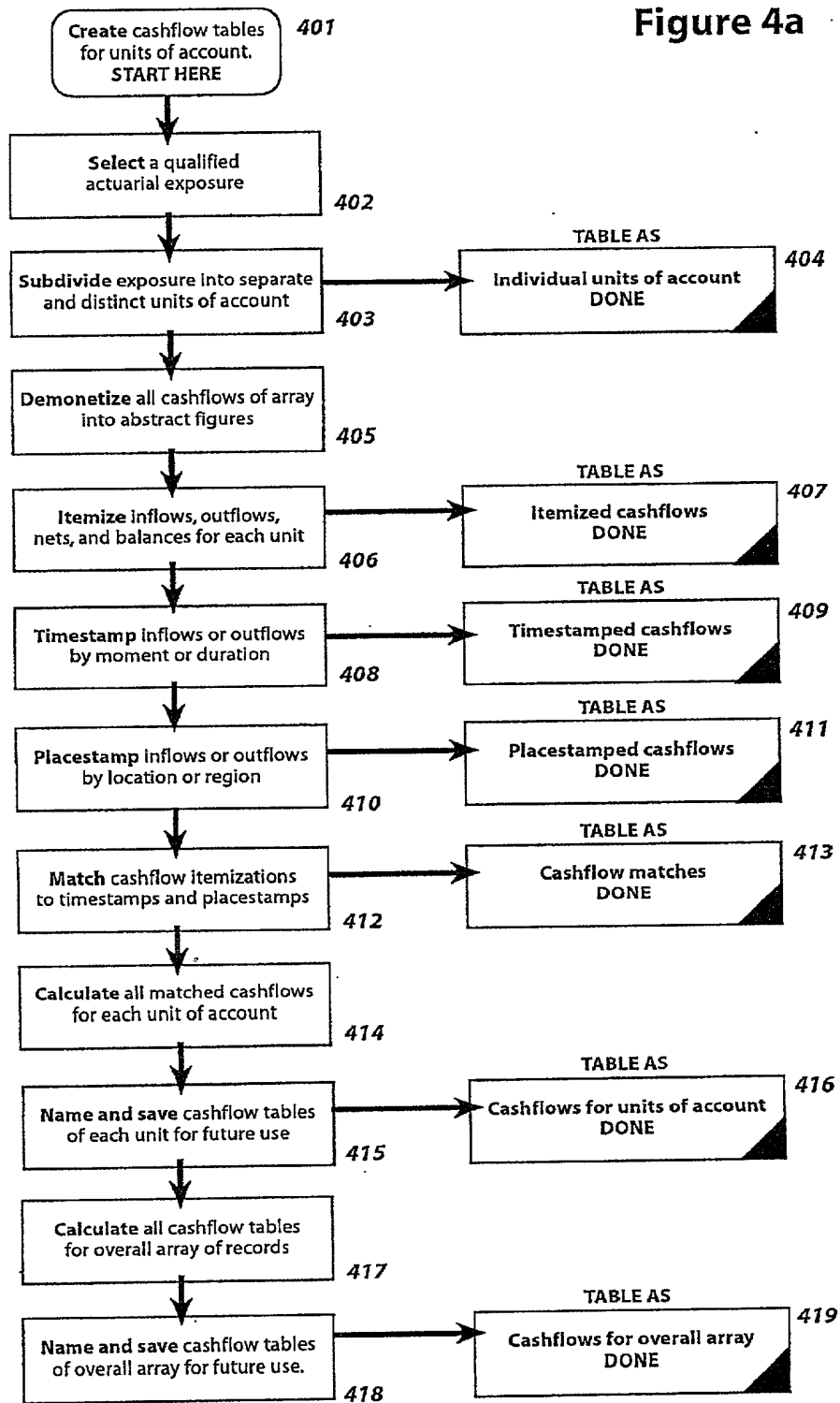


Figure 4b

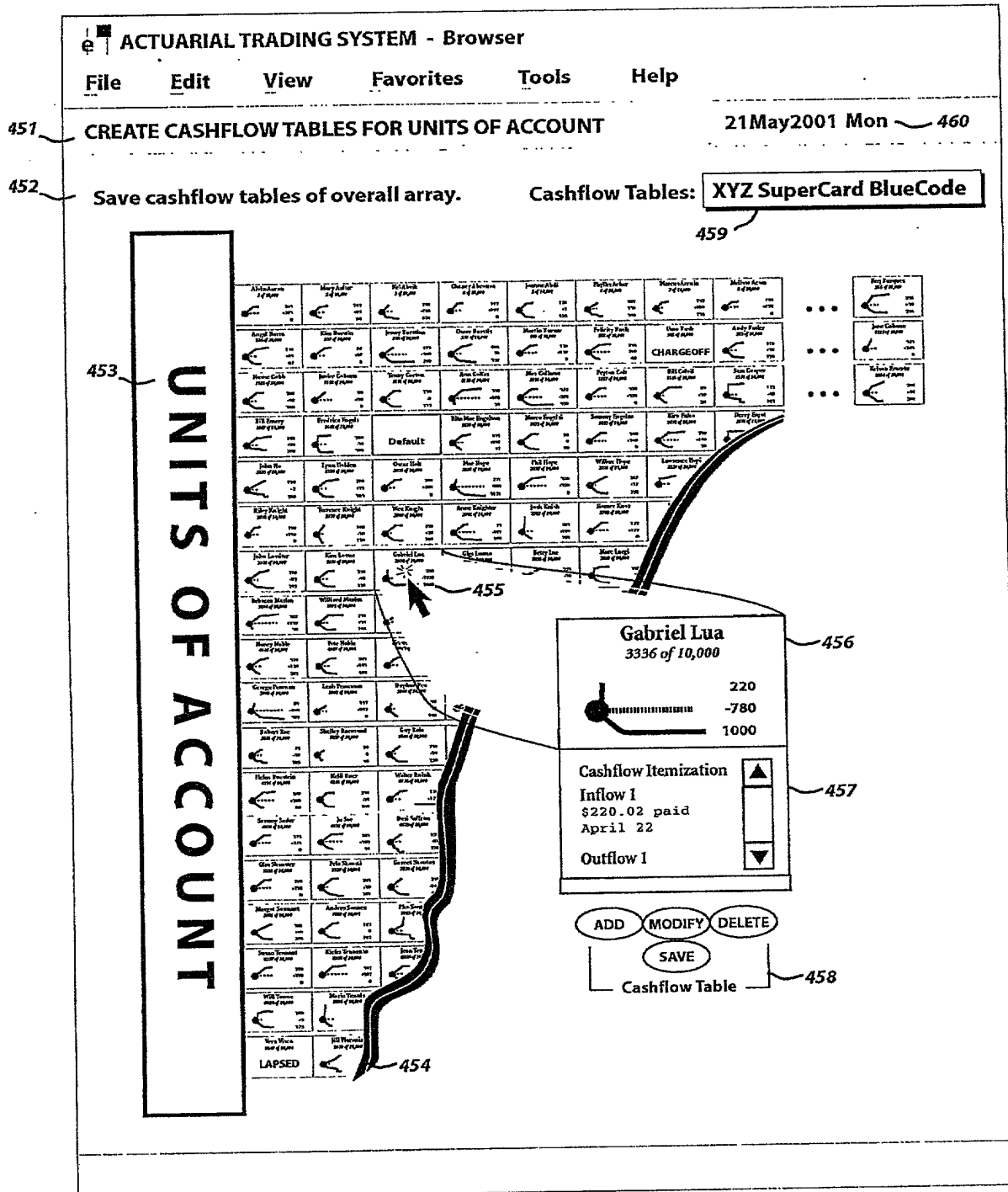


Figure 5a

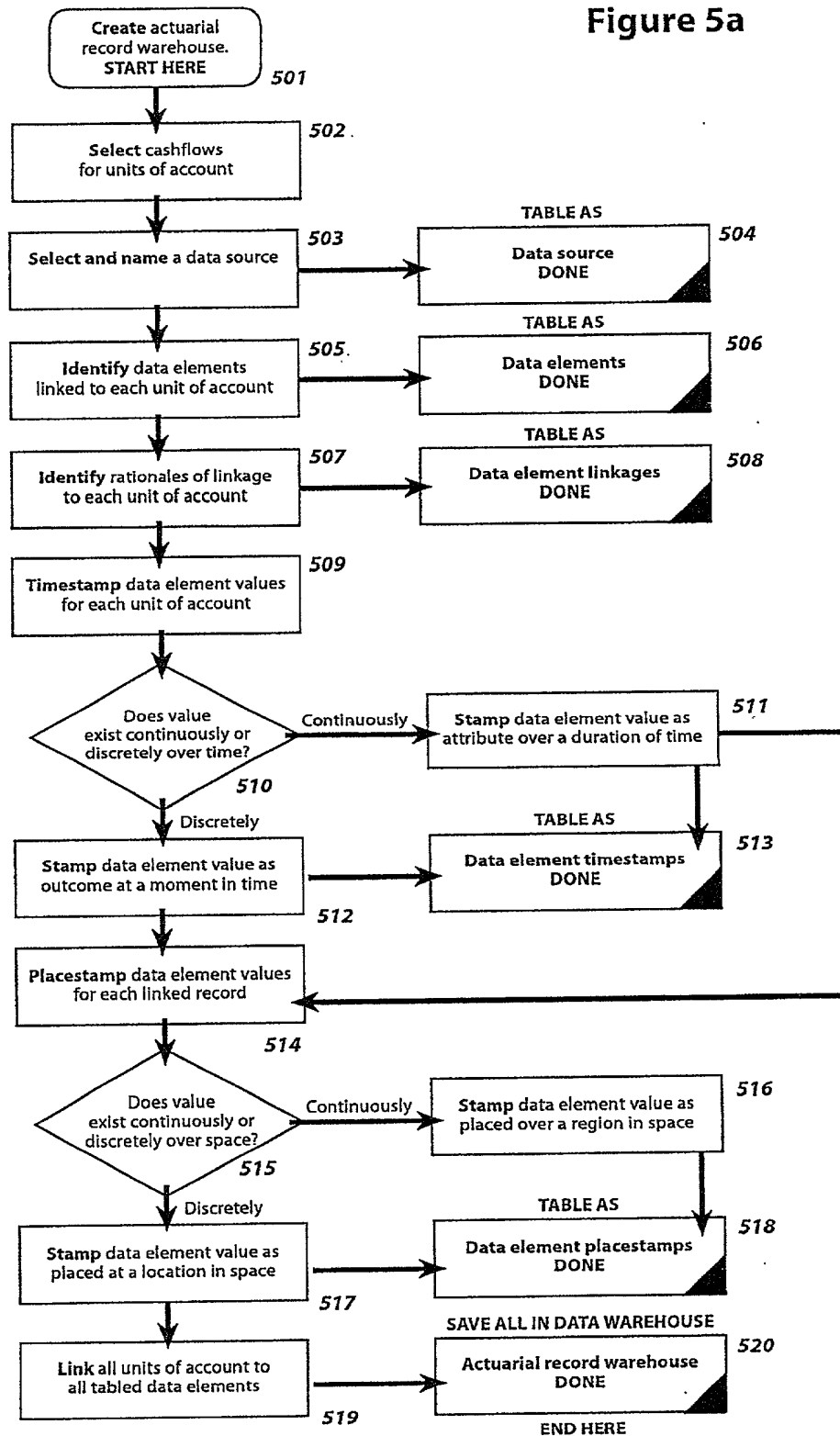


Figure 5b

ACTUARIAL TRADING SYSTEM - Browser

File Edit View Favorites Tools Help

551 CREATE ACTUARIAL DATA WAREHOUSE 21May2001 Mon 560

552 Save actuarial data warehouse. Cashflow Tables: XYZ SuperCard BlueCode

Warehouse Name: Warehouse 17

554 SAVE 556

553 UNITS OF ACCOUNT

557

558

559

Gabriel Lua
3336 of 10,000

220
-780
1000

Data Elements

001
Married?
Single
Application
Alltime
Allspace

002
Gender?
Males
Application
Alltime
Allspace

003
State Residency?
Louisiana

Figure 6a

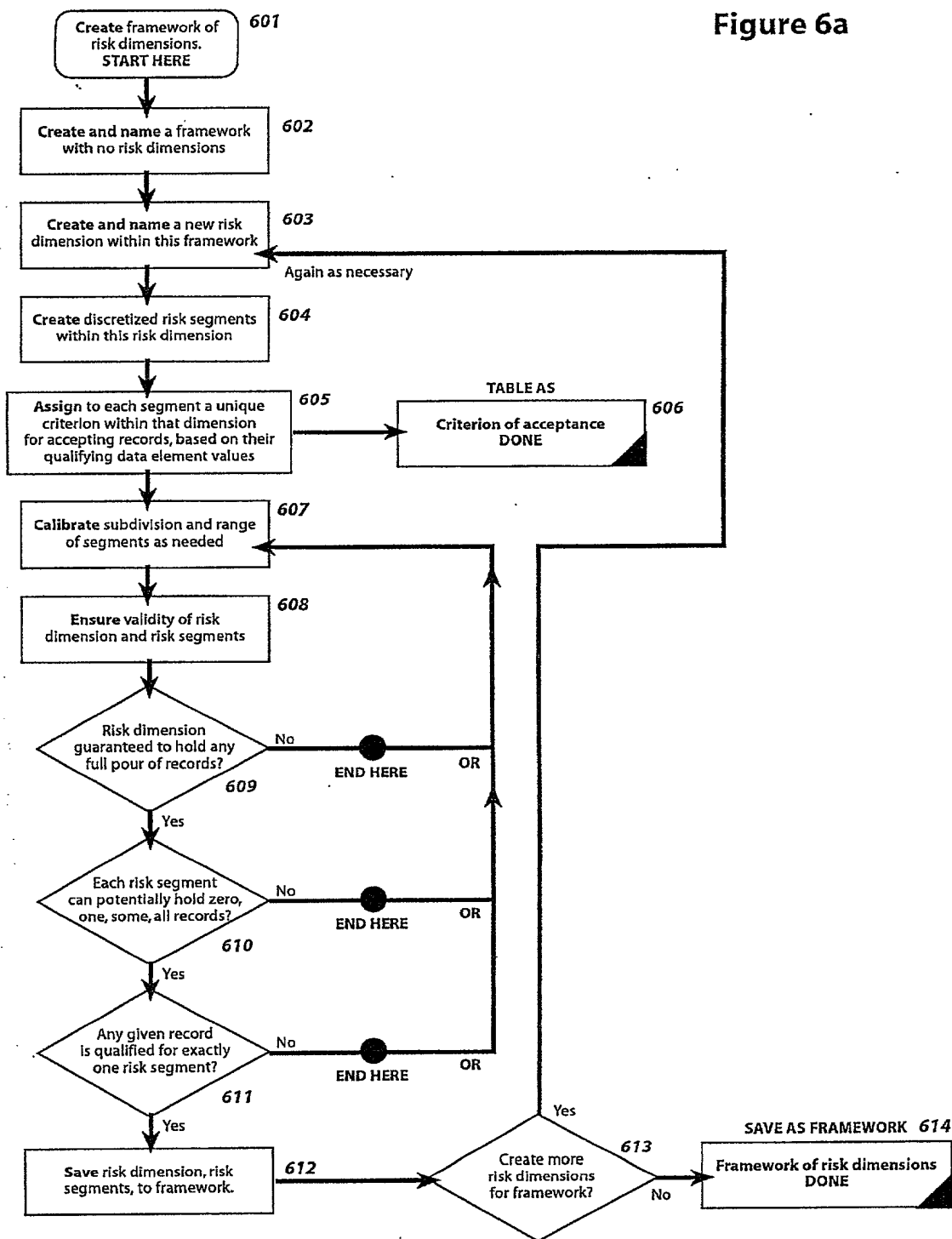


Figure 6b

File

Edit

View

Favorites

Tools

Help

651

CREATE FRAMEWORK OF RISK DIMENSIONS

21May2001 Mon

663

652

Save framework of risk dimensions.

Risk Segment:

<100k

659

Risk Dimension:

Income Level

660

Framework Name:

Framework For 5 Risks

661

ADD

MODIFY

DELETE

SAVE

662

Framework

653

654

State of Residency

AL AK AZ AR CA CO CT DE DC FL GA HI ID IL IN IA KS KY LA MEMDMA

MI MN MS MO MT NE NV NH NJ NM NY NC ND OH OK OR PA RI SC SD TN TX

UT VT VA VI WAWV WI WY Outside US

Age by Decade

20s

30s

40s

50s

60s+

Gender

Male

Female

Marital Status

Single

Married

Divorced

Widowed

656

Income Level

655

657

<100k

>100k

658

Figure 7a

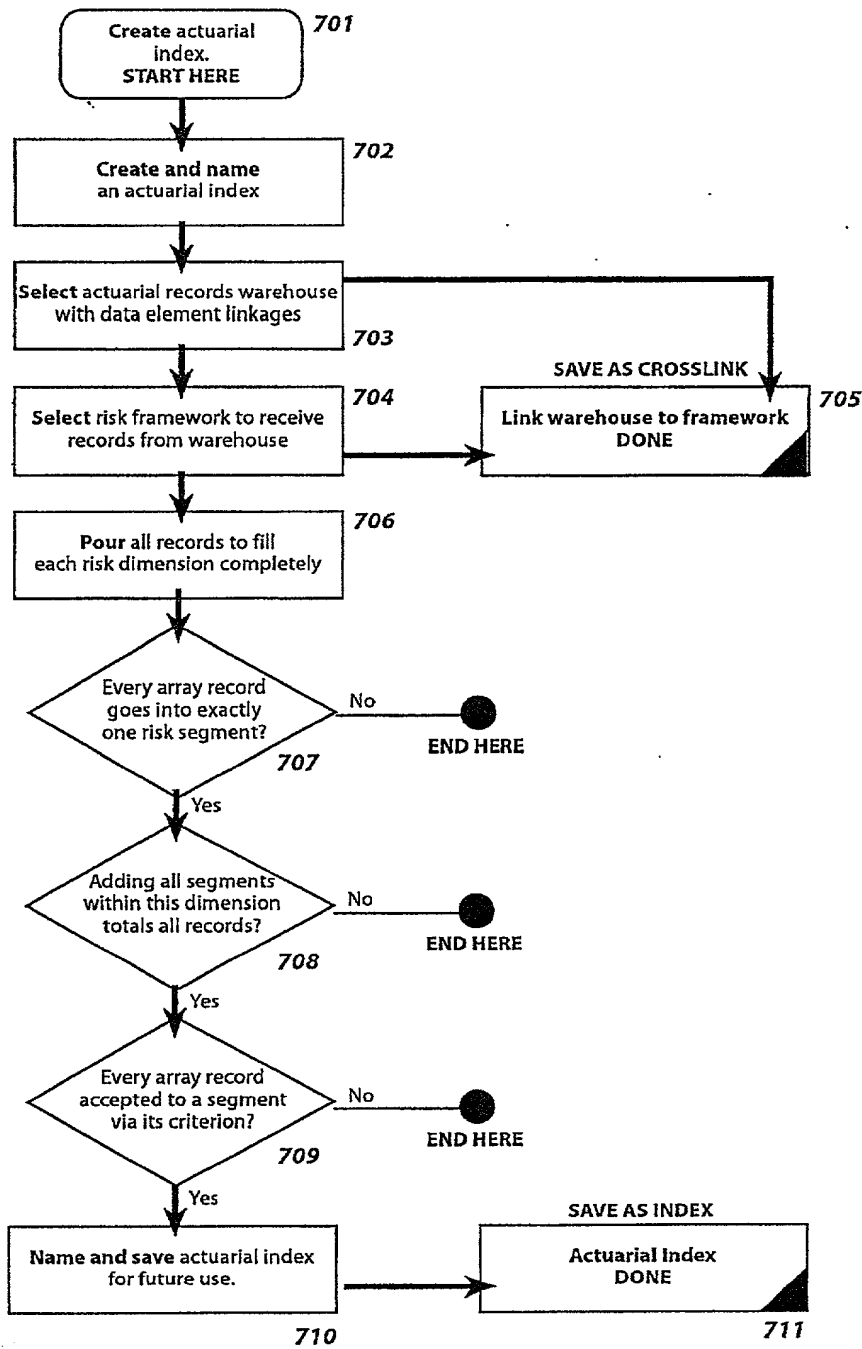


Figure 7b

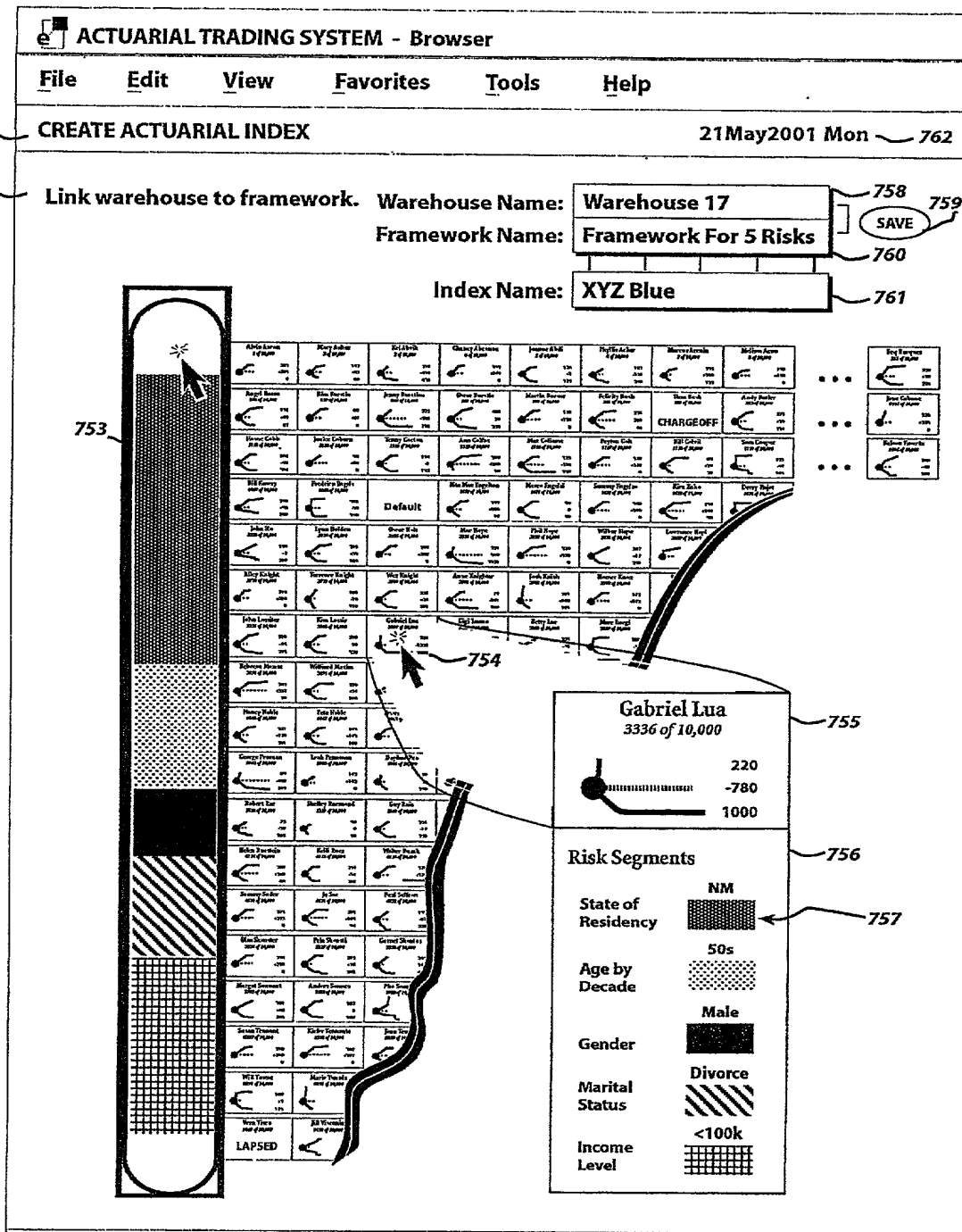


Figure 8a

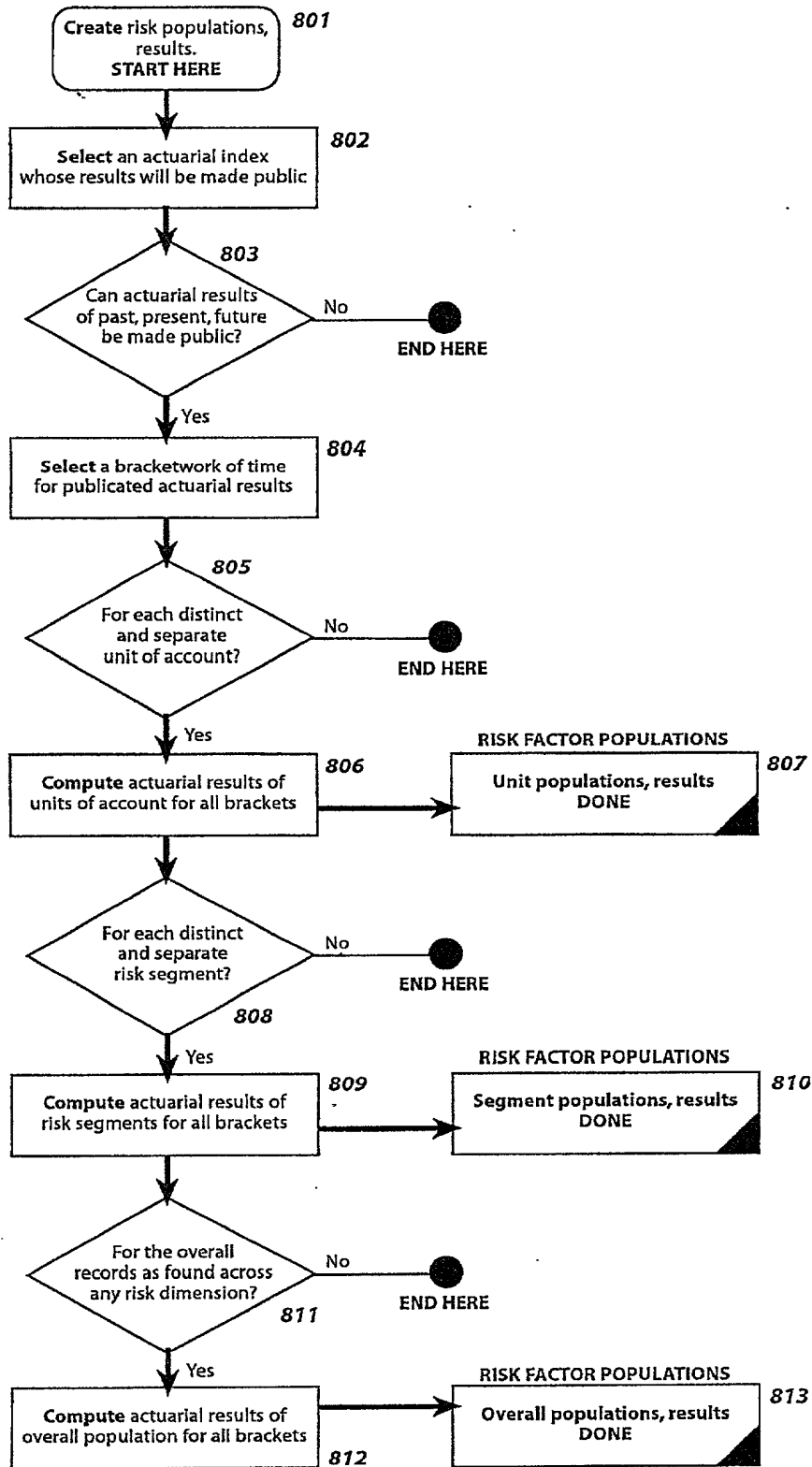


Figure 8b

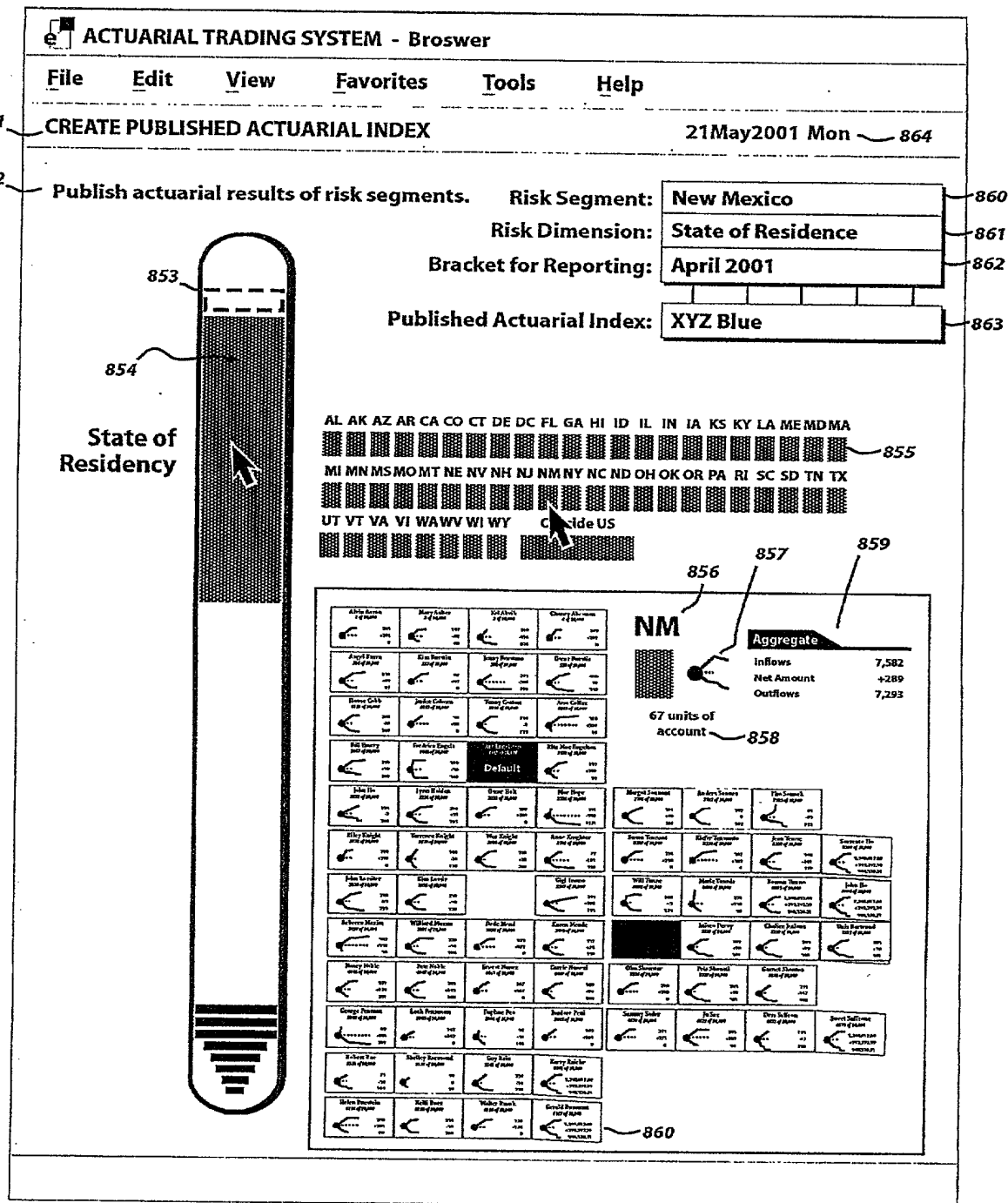


Figure 9a

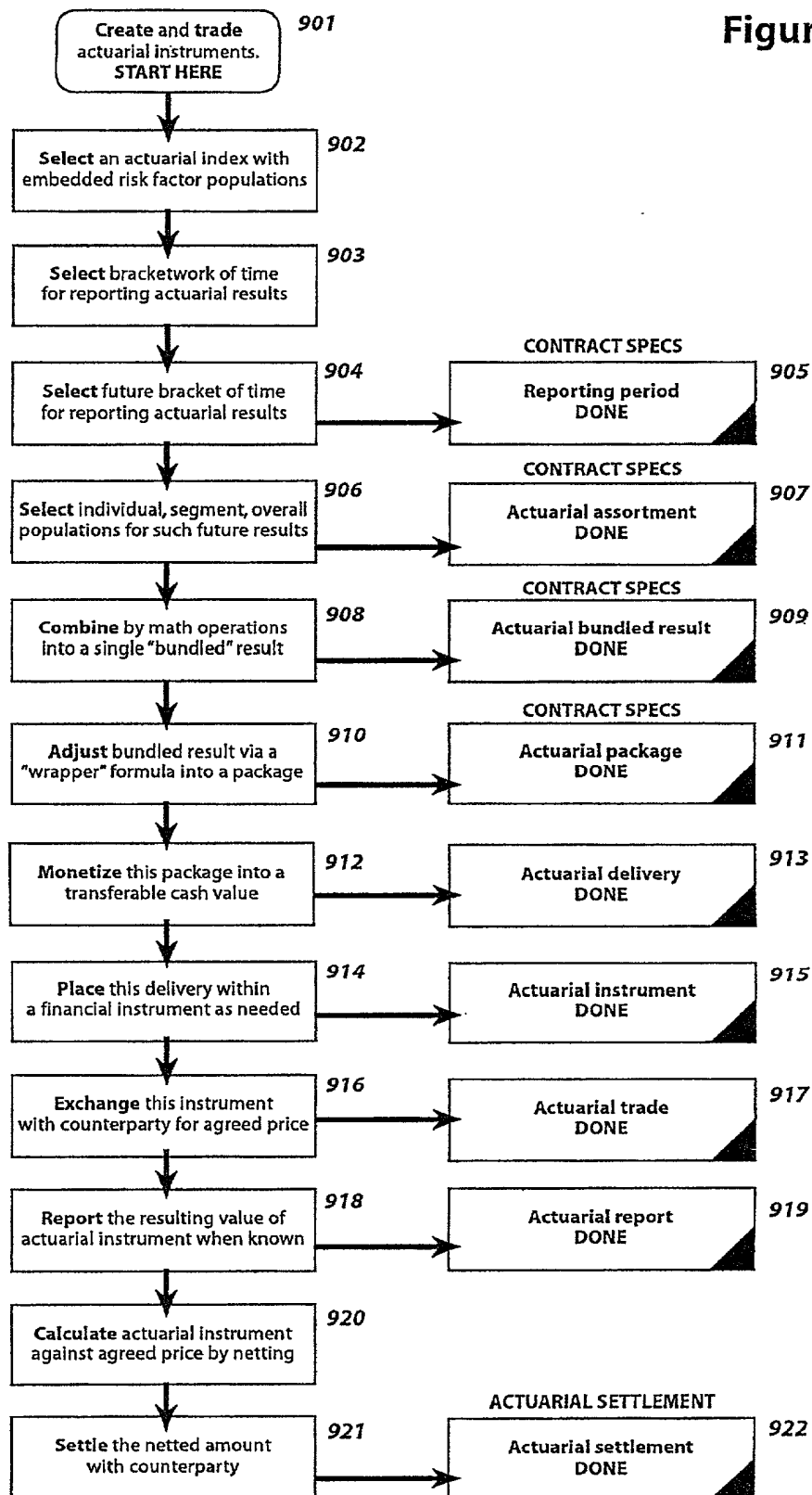


Figure 9b

ACTUARIAL TRADING SYSTEM - Browser

File Edit View Favorites Tools Help

CREATE AND TRADE ACTUARIAL INSTRUMENTS 950 Today's Date: 03Aug2001 Fri 951

Settle the netted amount in cash with counterparty: 952 Trade ID: Trade #8372 Trade Name: Forward #3 953 954

Trade #8372 955

Value: 7,000,000 USD 958

Value Date: 03Aug2001 Fri

Trade Date: May 5 2001 956

Counterparty: ABC Bank 957

Settlement Terms

Settlement Date: Aug 1 2001

Settlement: \$7,000,000

Already Settled?: Yes

Paid to: Us

Paid from: ABC Bank

Value: 7,000,000.00 USD 959

Value Date: 03Aug2001 Fri After Settlement 961

ADD MODIFY DELETE

SAVE 960

Leg

Calculate Value

Leg #1 962

Value: (89,000,000) USD

Value Date: 03Aug2001 Fri

We Payout: Forward Price

Direction of Delivery: We Payout 963

Forward Price of

Multiplier: 1000x 964

Agreed Upfront Price: 89,000 965

Total Amount: (89,000,000) 966

Leg #2 967

Value: 96,000,000 USD

Value Date: 03Aug2001 Fri

We Receive: Actuarial Delivery

Direction of Delivery: We Receive 968

Actuarial Delivery of

Multiplier: 1000x 969

Reporting Period: Jul 2001 970

Level of Aggregation: Segment 971

Segment Risk Population

Risk Segment: Male 972

Risk Dimension: Gender 973

Public Actuarial Index: XYZ Blue 974

Number of Units: 4682 Overall Total: 9947 975

47.07%

Result Type

Inflows Minus Outflows 976

Report Date: Aug 1 2001 977

Segment Result: 96,000 978

Actuarial Delivery: 96,000,000 979

One of Assortment: No 980

Combined into Bundle: No 981

Wrapped into Package: Yes 982

Figure 10a

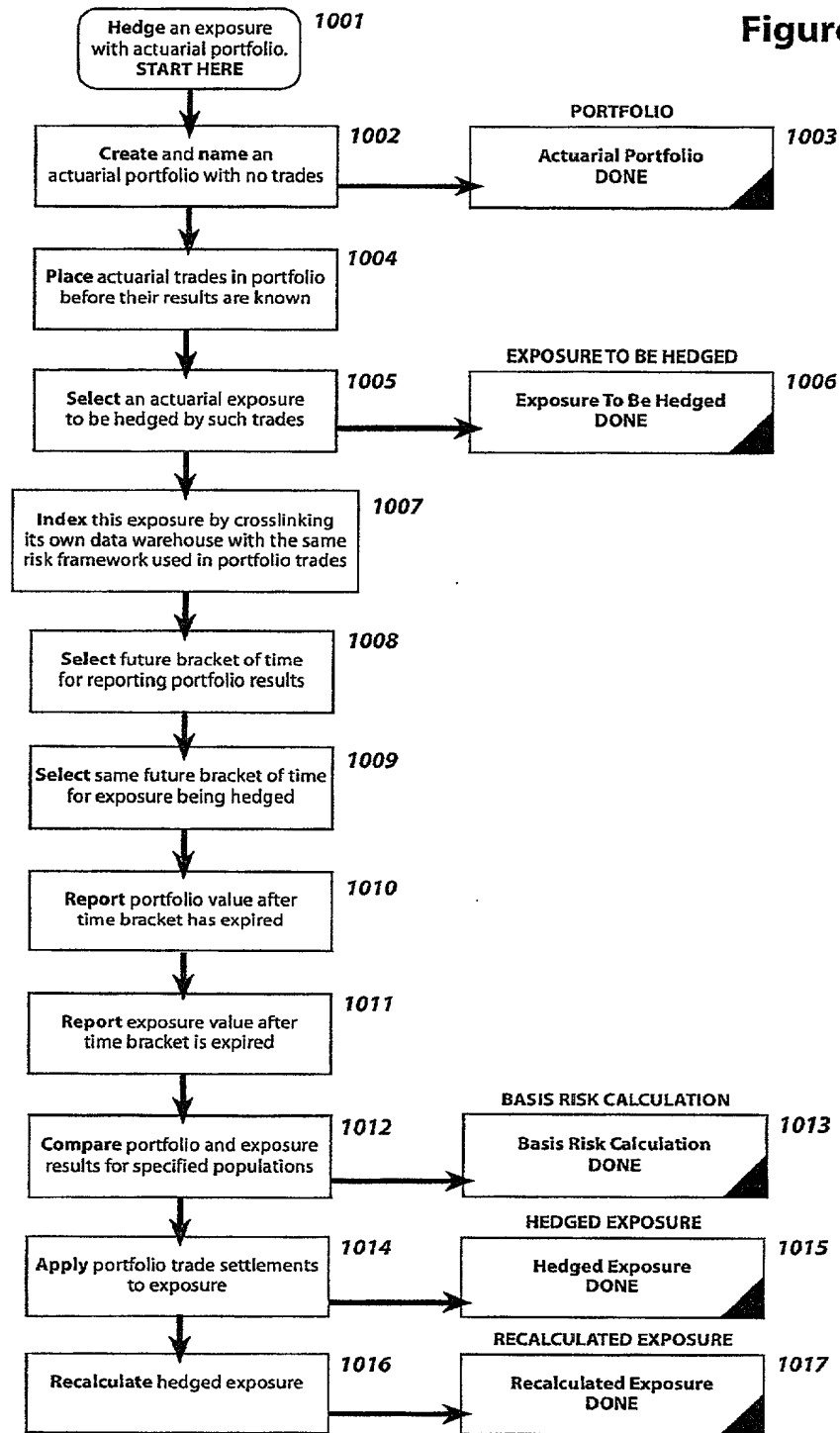


Figure 10b

ACTUARIAL TRADING SYSTEM - Browser

Figure 10b

File Edit View Favorites Tools Help

APPLY PORTFOLIO TRADE SETTLEMENTS TO EXPOSURE - 1050

Today's Date: 03Aug2001 Fri - 1051

1052

Portfolio Name: Forwards Plus
Created By: John Major

ADD NAME MODIFY DELETE SAVE

Public Actuarial Index: XYZ Blue
All Trades Settled?: Yes

1054

Trade #8372 We Receive Delivery of 1000x

Trade #8373 We Pay Delivery of 2000x

Trade #8374 We Pay Delivery of 10,000x

Trade #8375 We Receive Delivery of 500x

Trade Name Forward #3

Joe's Forward Trade

Deal with ABC Bank

Tweak of Portfolio

Trade ID Trade #8372

Trade #8373

Trade #8374

Trade #8375

Direction of Delivery We Receive Delivery of

We Pay Delivery of

We Pay Delivery of

We Receive Delivery of

Multiplier 1000x

2000x

10,000x

500x

Result Type Inflows - Outflows

Inflows - Outflows

Inflows - Outflows

Inflows - Outflows

Risk Segment Male

21, 22, 23

1-2 Years Ago

\$150k Salary Plus

From Risk Dimension Gender

Age

Bankruptcy

Income Level

Trade Name Forward #3

Joe's Forward Trade

Deal with ABC Bank

Tweak to Portfolio

Reporting Period Jul 2001

Jul 2001

Jul 2001

Jul 2001

Upfront Agreed Price \$89,000,000

\$37,450,000

(\$25,293,000)

(\$8,000,000)

Settlement Date August 01 2001

August 01 2001

August 01 2001

August 01 2001

Value of Delivery \$96,000,000

(\$39,000,000)

\$27,000,000

\$8,390,000

Settlement as Hedge \$7,000,000

(\$1,579,000)

\$1,707,000

\$390,000

Absolute Value Paid to Us from ABC Bank

MNO Credit from Us

Us from ABC Bank

Us from ABC Bank

Trade Name Forward #3

Joe's Forward Trade

Deal with ABC Bank

Tweak to Portfolio

Hedged Exposure Home Accounts

Home Accounts

Home Accounts

Home Accounts

Analog Result \$93,000,000

(\$39,000,000)

\$29,000,000

\$7,190,000

Specific Basis Risk \$3,000,000

0

(\$2,000,000)

\$1,200,000

Specific Basis Risk % +3.23%

0.00%

-7.41%

+16.78%

Basis Risk + Hedge \$11,000,000

(\$1,579,000)